





December 17,1993

Mr. Dave Croxton United States Environmental Protection Agency Region 10 1200 Sixth Avenue Seattle, Washington 98101

Subject: Review Comments on Interim Final RCRA Facility Assessment

Terminal 91, Seattle, Washington

Dear Mr. Croxton:

Enclosed are the review comments on the following document, which will be referred to herein as the Interim Final RFA:

PRC Environmental Management, Inc. 1993. Interim Final Resource Conservation and Recovery Act (RCRA) Facility Assessment (RFA), Port of Seattle/Burlington Environmental, Inc. (BEI) Pier 91 Facility, Seattle, Washington. Report prepared for U.S. Environmental Protectionn Agency (EPA) Office of Waste Programs Enforcement. 31 March 1993.

GENERAL COMMENTS

The Interim Final RFA makes several references to certification and closure of units at the BEI Pier 91 treatment and storage facility. These terms have specific definitions and requirements under RCRA and the Dangerous Waste Regulations. The use of these terms in the Interim Final RFA might be different than their regulatory definitions. Unless documentation of certification and closure has been provided, the use of these terms should be avoided in the RFA.

Location descriptions for several solid waste management units (SWMUs) in the Interim Final RFA were vague. These SWMUs are described in more detail in the Specific Comments section below. The Interim Final RFA would benefit from a location map of Terminal 91 showing the locations of all SWMUs and areas of concern (AOCs).

P.O. Box 1209 Seattle, WA 98111 U.S.A. (206) 728-3000 TELEX 703433 FAX (206) 728-3252



SPECIFIC COMMENTS

<u>Page</u>	Section/ Paragraph	Comment
3	§1.2 ¶4	Port of Seattle participant was Tom Newlon, not Don Newlin.
4	§2.1 ¶2	The Port of Seattle's Terminal 91 property is approximately 124 acres, not 120 acres.
4	§2.2 ¶3	The text should be revised to read: "Port of Seattle leases portions of Terminal 91 to BEI, City Ice and Cold Storage Company (City Ice), and Distribution Auto Services (DAS). BEI subleases portions of its facility to Pacific Northern Oil Company (PANOCO)." Doug—other subleases may be appropriate to list here.
4	§2.2 ¶3	The second sentence should be revised to read: "BEI operates a hazardous waste treatment and storage facility, and a waste oil treatment facility"
4	§2.2.1 1	The text should be revised to read: "Texaco transferred ownership to the U.S. Navy during World War II//and/the/Port/of/Seattle/operated/the facility. The U.S. Navy later transferred ownership to the Port of Seattle in the middle 1970s."
7	§2.2.1 ¶1	The Interim Final RFA reports that several tanks were closed during the BEI operation. However, documentation of closure of hazardous waste management units (HWMUs) at the BEI facility under RCRA and the Dangerous Waste Regulations has not been provided. Therefore, it appears that these tanks may not have been closed in accordance with existing regulations.
7	§2.2.2 ¶5	The second sentence should be revised to read: "Since 1981, Ttanks 91 through 93, 95, 97, 99, 101 through 104, and 113 have been áré operated by PANOCO. From 1974 through 1981, BEI was the operator of these tanks under a throughput agreement with PANOCO."

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8	§2.2.2 ¶2	The word "Terminal" in the first sentence should be replaced with the word "Pier".
8	§2.2.3 ¶4	Building W-47 is being demolished OctDec. '93
10	§2.2.3 ¶1	The "reported oil spill" resulted from ammonia/water under pressure discharging on treated timbers and pilings under the dock, resulting in washing of accummulated scums and surface creosote into the water causing a sheen.
13	§2.2.5 ¶2	Building W-48 is being demolished in Oct. thru Dec. '93.
13	§2.2.5 ¶3	All Port of Seattle transformers on this facility are non PCB transformers. The Port of Seattle removed or changed out all of the old PCB transformers.
13	§2.3	Most of the waste reported under W.A.Ois the ringate generated by temporary tenants using T-91 as a site for barge cleaning operations.
14	§2.3 ¶1	The boiler was operated by Chempro/BEI thru much of this period.
15	§3.2 ¶1	60 ft fill -at end of solid fill piers.
15	§3.2 ¶8	"Aguatard" - add hydraulic conductivity values and potential" Why perpetuate this myth.
16	§3.3 ¶1	Add clairification to "Lake Jacobs."*******
16	§3.3 ¶1	Discharge now mainly to Metro from BEI. Previously was to Elliott Bay.
17		Include wells from tank pull.
18		Piping system is much more extensive than shown especially if you include historic piping also old oil water separator.
19	§3.4 ¶1	Could impact not "would impact" it depends on concentration.

19 §3.4 ¶2

Uptake of contaminants from sediments would require vascular aguatic plants, with root systems. There are none on this site.

21 §4.1.1 ¶1

The Draft RFA (Tetra Tech 1988) and the Interim Final RFA identified only one "RCRA-regulated unit," the hazardous waste container storage area (Building M-19, SWMU 1). (Not adequately sampled for clean closure). However, the entire facility leased by BEI, which includes approximately 4 acres with structures and underground piping, has been permitted since 1980 under interim status for treatment and storage of dangerous waste. In addition, in August 1992, BEI received a final facility permit for treatment and storage of dangerous waste in 7 existing tanks (i.e., tanks 105, 107, 109, 110, 111, 112, and 164) and 8 proposed tanks. Therefore, all permitted interim status and final facility treatment and storage units should be considered "RCRA-regulated units," or HWMUs.

The Interim Final RFA also noted that the hazardous waste container storage area is now operating under a State-issued RCRA permit. As described above, the final facility permit allows treatment and storage in tanks only. The former hazardous waste container storage area was operational only under interim status and is not operating under a State-issued permit, as reported. The current permit does not allow storage of containers of dangerous waste at the facility for greater than 90 days.

21 §4.1.1 ¶4

Three SWMUs (i.e., SWMUs 2, 5, and 12) reportedly were closed after 5 July 1988. These SWMUs include the oil/water separator used to receive waste at the facility, and tanks permitted under interim status. However, as previously stated, documentation has not been provided for closure of HWMUs under RCRA and the Dangerous Waste Regulations. Therefore, these units may not have been properly closed under existing regulations.

22 §4.1 ¶1

Re: SMU-2 add free product. Eleven inches of free product was found just downgradient in a Port monitoring well in street.

22	§4.1.1
	¶7/₁

As reported in the Interim Final RFA, existing documentation shows a discrepancy in identification of Tank 165 (i.e., SWMU 13). The statement that the tank was "certified and scrapped in 1988" should be expanded to explain the term "certified" and to document proper closure under RCRA and the Dangerous Waste Regulations. If Tank 165 was still in service in 1988, the identity of the tank that was scrapped in 1986 should be provided.

22 §4.1.1 ¶5

As reported in the Interim Final RFA, existing documentation shows a discrepancy in identification of Tank 118 (i.e., SWMU 15). The statement that the tank was certified and scrapped in 1986 should be expanded to explain the term "certified" and to document proper closure under RCRA and the Dangerous Waste Regulations. If Tank 118 was still in service in 1988, the identity of the tank that was scrapped in 1986 should be provided.

22 §4.1.1 ¶6

A release from Tank 91 in 1978 would have been in the Big Tank Yard, not the Marine Diesel Yard.

22 §4.1.1 ¶6

Based on the description in the Interim Final RFA for cleanup of the bunker fuel spill from Tank 91, it is not clear that the area was fully remediated. However, the Interim Final RFA states that "cleanup was reportedly complete by late 1979 or early 1980." More complete documentation of these cleanup activities, including verification sampling and documentation of quantities of recovered fuel, should be provided. However, based on the current presence of free product beneath the BEI facility, it appears unlikely that "cleanup was complete."

23 §4.1.1 ¶1

The statement "Tanks 105, 107, 109 through 112, and 164 are certified for RCRA service" should be explained. Tanks 105, 107, and 109 through 112 are currently permitted for dangerous waste service only if they are upgraded to provide adequate leak detection in accordance with the Dangerous Waste Regulations. 24§4.1.3

24 §4.1.3

Add Port samples, add corrections. This may have been from gas storage tanks, fuel transfer lines, or other Navy or early Chempro activities.

24	§4.1.3 ¶5	Based on the description provided in the Interim Final RFA, the location of SWMU 20, the American Petroleum Institute gravity separator, could not be determined.
25	§4.1.5 ¶1	Add "a small"and correct BEI to PNO.
	¶5 ¶3	§4.1.5 Based on the description provided in the Interim Final RFA, the location of SWMU 21, an abandoned oil/water separator, could not be determined. The text could be modified to provide a reference to tank T-91J on Figure 3, if that is the same unit.
	¶1	Potential release of fuel oil not contaminated waste oil.
26	§4.1.7 ¶5	The statement that SWMU 23, the treated wastewater tank, was "decontaminated, certified, and scrapped" in 1988 should be expanded. The meaning of the term "certified" should be explained. Closure of treatment, storage, and disposal (TSD) facilities under the Dangerous Waste Regulations requires an independent registered professional engineer's certification of closure, which has not been provided. It is not clear why the unit was scrapped without undergoing closure under RCRA and the Dangerous Waste Regulations.
28	§4.1.8 ¶1	Organic solvants were also located 3 to 5 inches under pavement of road where Emcon started to sample but then stopped (see RFI 1988).
28	§4.1.9 ¶5	The Interim Final RFA states that belowground piping (i.e., SWMU 25) was used to transfer dangerous waste from tank to tank. The piping was "removed from service, decontaminated by flushing, and filled with concrete in March 1991." Based on above discussions,

There is alot of transfer piping above and below ground some active some inactive. All inactive above or below ground has probably not been cleared and filled with concrete this description appears to indicate. More details and specifics are needed..

it appears that this HWMU may not have been properly closed under the Dangerous Waste Regulations. Also alot of transfer piping other than just 5 mulljacks.

29	§4.1.1	The berming of the transfer area west of Bldg. 19 is relativity recent. The area extent of a 10,000 gal spill was undoubtedly beyond those specifics areas when strom water was contained and treated prior to discharge in 1978.
30	§4.2.1 ¶3	The location of SWMU 27, concrete berms, could not be identified based on information provided in the Interim Final RFA. Also, a reference for, or description of, the "1983 oil spill at the BEI facility" should be provided.
34	4.2.4 ¶3	Should be corrected to "behind a wire fence" from "behind wires".
35	§4.3.1 ¶4	The first sentence should reference Figure 3, not
		Figure 5, for building locations. These buildings are in the process of being demolished. The tenants were told to vacate the premises and remove all of their material. They have done so. The asbestos abatement phase is complete. The remainder of the demo is scheduled to take place from 12/93 to 2/94.
36	§4.3.2 ¶3	The first sentence should reference Figure 3, not Figure 5, for building locations. The second to last sentence should refer to "wire fencing" not "wiring".
36	§4.3.2 ¶3	The first sentence should read "Building W-47, leased by City Ice, is on the western part of the Port of Seattle/Terminal 91 property (Figure \$3). Areas within Bldg. W-47 are subleased by City Ice to various fishing boat companies and small manufacturing industries that support the fishing fleet.
36	§4.3.2 ¶3	These buildings are in the process of being demolished. The tenants were told to vacate the premises and remove all of their material. They have done so. The asbestos abatement phase is complete. The remainder of the demo is scheduled to take place from 12/93 to 2/94.

37	§4.3.3 ¶2	The second sentence should reference Figure 3, not Figure 5. Areas within Bldg. W-47 are subleased by City Ice to various fishing boat companies and small manufacturing industries that support the fishing fleet.
38	§4.4.1 ¶5	The first sentence should reference Figure 3, not Figure 5.
39	§4.4.2 ¶5	The first sentence should reference Figure 3, not Figure 5.
43	§4.5 ¶2	SWMUs 39 and 41 are on property owned by the Port of Seattle and leased to various tennants. SWMU 45 and a part to SWMU 42 are owned and controlled by teh City of Seattle under easements. SWMU 40, 44 and part of 42 are owned and operated by Port of Seattle.
43	§4.5.1 ¶3	The location of SWMU 39, waste stored beneath freeway, could not be determined from the Interim Final RFA. This area is leased by the Port of Seattle to City Ice.
44	§4.5.2 ¶2	Analytical data is available on this material and will be provided. This material is soil cuttings from borings done prior to recent construction. These soils are slightly contaminated with petroleum hydrocarbons that were later found to be primarily old asphalt and some creosoted timber from onsite construction materials. These drums will be removed

removed.

within the next month. The oil sheen on the asphalt resulted from an unknown person placing an open container of motor oil next to the drums. It was

44	§4.5.3
	at c

Berth stations C, D, E and 8 are used for fuel oil loading and offloading. Berth K is available, though not currently used, for off loading oily waste water to BEI. The old inactive lines are in the process of being removed, H, I, J, have been removed. All petroleum and petroleum waste water piping on the facility is leased to BEI. Portions of that are subleased by BEI. to PNO. All berth stations are on apron over water. Photograph 42 appears to be of other valves, etc. associated with the petroleum piping which are located at various sites above and below ground on the facility. The accummulated sludges are around valve vaults.

45 §4.5

All reference to berth stations should include valve vaults.

45 §4.5.4 ¶4

The locations of the transformers representing SWMU 42 are only vaguely identified in the descriptions provided in the Interim Final RFA. The transformers on the west side of bldg. C155 and pictured in photograph 43 are in a Seattle City Light substation. They are active and they are owned and operated by Seattle City Light. The substation area is controlled by City Light, under an easement. The PCB content of these transformers is unknown to the Port. The transformers on the west side of bldg. W-47 and pictured in photograph 44 are a Port substation. All port of Seattle transformers on the Terminal 91 facility are certified non PCB transformers. They were all changed over or cleaned out several years ago.

46 §4.5.5 ¶3

The SWMU 43 Storage Shed is for Flammable materials as Waste Oil. Buildings W-47 and W-48 and associated structures are in the process of being demolished. The tenants were told to vacate the premises and remove all of their material. They have done so. The asbestos abatement phase is complete. The remainder of the demo is scheduled to take place from 12/93 to 2/94. This storage shed has been vacated and will be removed.

47 §4.5.6 ¶2

References to a "vector" truck should be changed to "vactor" truck.

47	§4.5.6 ¶2	The second sentence should read "In the late 1980s, oil from the adjacent Burlington Northern Railroad property was observed collecting in the first catch basin on the Port of Seattle property."
47	§4.5.7 ¶6	The storm drain/CSO is not owned by the Port. It is owned by the City of Seattle and only exit across Port property. The first sentence should state that the 92"CSO is City of Seattle.
48	§4.5.7 ¶5	There is also a 44" storm drain receiving a large portion of flow from off-site including (especially prior to 1990) drainage from the City of Seattle vactor truck dump site. This storm drain exists across Port property at slip 91W.
49	§5.1 ¶1	The location of AOC 1, the alley between BEI and City Ice, could not be identified based on information provided in the Interim Final RFA.
48	§5.0	AOC 13 through 16 were closed before Chempro/BEI. AOCs 12 and 17 were operational during Chempro/BEI as well as before.
49	§5.2 ¶2	The sixth sentence states that "eleven inches of free product were found in an upstream well during the 1989 removal of Tank T-91-N." The association of this sentence with the discussion of AOC 2, USTs on Terminal 91 premises, implies that the free product was associated with a release from the tank. However, based on the location of the well (upgradient of tank91-n and immediatly downgradient of the old, then active, oil water seperator), it appears more likely that the free product is associated with the free product plume beneath the BEI facility, currently under investigation by BEI under a RCRA 3008(h) Order. This should be clarified in the text of the Final RFA.
49	§5.3 ¶4	These pipelines have been removed. No contaminated soils were found.
50	§5.5 ¶5	Building W-38 should read T-38 for PCBs in transformer pad removed in 1986?

51	§5.7	
31	¶3	The third and fourth sentences should be changed to more accurately reflect the activities and materials present at the site. Suggested language is as follows: "Excavation of/these/tontaminants revealed layers of old asphalt and creosoted timbers (Port of Seattle 1992), which represented old contstruction material left onsite during subsequent rehabilitations of Terminal 91. These tontaminants materials are still present at this location (Hotchkiss 1992a)."
51	§5.9	
	¶5	The word "Terminal" should be replaced with the word "Pier" in the first sentence.
52	§5.10	
32	¶1	The location of AOC 10, the triangular area hit, could not be identified based on information provided in the Interim Final RFA. Also, the first sentence should be changed to read "A triangular area immediately east of the REI leased facility."
52	§5.12 ¶3	Clarification should be made that Building 17 (AOC 12) is no longer present onsite, but was present on site during early Chempro/BEI operations.
53	§5.17 ¶2	Based on photographs, this unit was operational during BEI lease.

REFERENCES

Tetra Tech. 1988. Draft Report, RCRA Facility Assessment, Chemical Processors, Inc., Pier 91, Seattle, Washington. 28 April 1988. Presented as Appendix A in the Interim Final RA.

If you have any questions regarding the information presented in this letter or any other issues, please call me at (206) 728-3192.

Sincerely,

Douglas A Hotchkiss,

Environmental Management Specialist

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cc.Newlon, Ecology Tritt